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Supplement 94

Crop Losses from Plant Diseases in the United States

1935

October 31, 1936

BUREAU OF PLANT INDUSTRY

UNITED STATES DEPARTMENT OF AGRICULTURE

ESTIMATES OF CROP LOSSES FROM DISEASES IN THE UNITED STATES IN 1935

Compiled by

H. A. Edson, Jessie I. Wood, and Nellie W. Nance

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FOREWORD

It has been several years since the bases of these estimates and the method of their computation have been discussed. It is, therefore, thought advisable to repeat relevant portions of the explanation given in Supplement 83 (1932. Foreword by N. E. Stevens, pp. 1 - 3):

In conformity with previous practice, the estimates are expressed in percentage of loss, or in commercial units - never in dollars, because of complex economic considerations which this would involve.

In general the crop loss estimates as originally furnished by collaborators to the Plant Disease Survey have been computed and issued in tabular form as preliminary estimates. These have been sent back to the collaborators for their revision and suggestions. It is, of course, recognized that most of the figures are estimates in the strict sense of the word, that is, they are usually not the results of counts or calculation but of field observations.

The most serious weakness of these estimates is that many states make no reports. Computations are in all cases based on states reporting, thus where an average is given for "U. S." it should be interpreted as meaning "for the reporting area".

The basis for computation has been the production assumed to have been possible if it were not for disease. The actual production is taken to represent 100% minus the sum of the percentages of loss from all diseases of the crop in question. The possible production is obtained by dividing the actual production by 100% minus the total percentage of loss from all diseases of the crop.

$$\text{Thus: Possible production} = \frac{\text{Actual production}}{100\% - \%\text{ loss from all diseases of crop}}$$

The estimated reduction in yield from a given disease, then, is obtained by multiplying the estimated possible crop production by the estimated percentage loss from the disease.

$$\text{Thus: Estimated crop loss from given disease} = \text{Possible production} \times \%\text{ individual disease loss}$$

The percentage loss for the United States is obtained by dividing the total reduction in yield (sum of the State losses) by the possible production for the country (total actual production plus the total reduction in yield from all diseases of the crop).

The figures for the yield of various crops were taken directly from the statistics of important crops by States given in the publication, "Crops and Markets", issued by the United States Department of Agriculture. These are usually published in the December issue. The method of computation, while somewhat time-consuming, makes possible a percentage loss estimate representing the entire reporting area.

Examples are given below:

EXAMPLES

I. Loss from wheat diseases in Kansas in 1919:

Actual production for State: 151,001,000 bushels.

Total estimated percentage loss from diseases: 15.5.

Possible production: $\dfrac{151{,}001{,}000}{100\% - 15.5\% = 84.5\%}$ = 178,699,000 bushels.

Reduction in yield from all diseases:
15.5% x 178,699,000 = 27,698,000 bushels.

Estimated percentage loss from stem rust: 10.
Reduction in yield from stem rust:
10% x 178,699,000 = 17,869,900 bushels.

II. Percentage loss from stem rust and from all diseases of wheat in the United States in 1919:

Total actual production for country: 940,987,000 bushels.

Sum of calculated State losses from all diseases (total reduction in yield): 192,275,000 bushels.

Possible total production for country:
940,987,000 + 192,275,000 = 1,133,262,000 bushels.

Percentage loss from all diseases: $\dfrac{192{,}275{,}000}{1{,}133{,}262{,}000}$ = 17.

Sum of calculated State losses from stem rust: 71,417,000 bushels.

Percentage loss from stem rust: $\dfrac{71{,}417{,}000}{1{,}133{,}262{,}000}$ = 6.3.

Table 1. Estimated reduction in yield of wheat due to scab (*Gibberella saubinetii*), leaf rust (*Puccinia rubigo-vera tritici*), stem rust (*P. graminis*), bunt (*Tilletia* spp.), loose smut (*Ustilago tritici*), foot rots (various organisms), and other diseases, 1935.

State	Production 1,000 Bushels	Scab %	Scab 1,000 Bushels	Leaf Rust %	Leaf Rust 1,000 Bushels	Stem Rust %	Stem Rust 1,000 Bushels	Bunt %	Bunt 1,000 Bushels	Loose Smut %	Loose Smut 1,000 Bushels	Foot Rots %	Foot Rots 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
*Maine	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mass.		t	+	8.	+	12.	+	-	-	-	-	t	+	20.	+
N. Y.	6,273	-	-	6.	409	-	-	t	+	2.	136	-	-	8.	545
*N. J.	1,372	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	18,960	t	+	12.	2,880	t	+	3.5	840	2.5	600	t	+	21.	5,040
Ohio	42,406	-	-	1.5	670	1.5	670	1.5	670	0.5	223	0.1	45	5.1	2,278
Ind.	28,618	2.	690	15.	5,172	-	-	t	+	t	+	-	-	17.	5,862
Ill.	26,800	0.2	63	12.5	3,932	1.	315	0.3	94	0.5	157	t	+	14.8	4,655
Mich.	17,919	t	+	t	+	0.5	94	2.5	469	1.	188	t	+	4.5	845
Wis.	2,254	2.	56	15.	419	1.5	42	0.5	14	t	+	0.1	3	19.3	540
Minn.	19,676	3.	1,789	5.	2,981	57.	33,986	1.	596	1.	596	t	+	67.	39,948
Iowa	6,118	1.5	112	10.	746	6.5	485	t	+	t	+	-	-	18.	1,343
Mo.	24,176	4.	1,131	5.	1,414	4.	1,131	t	+	1.5	424	-	-	14.5	4,100
N. D.	53,772	t	+	5.	7,908	57.	90,147	1.	1,582	1.	1,582	1.	1,582	66.	104,383
S. D.	30,822	1.	497	5.	2,486	29.	14,417	1.	497	2.	994	t	+	38.	18,891
Nebr.	39,472	-	-	-	-	15.	6,966	-	-	-	-	-	-	15.	6,966
Kans.	59,951	0	0	5.	3,939	12.	9,453	0.3	236	0.2	158	6.	4,727	23.9	18,828
*Del.	1,658	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Md.	8,323	3.	289	2.	192	-	-	5.	481	1.5	144	-	-	13.5	1,298
Va.	8,714	1.	100	3.5	349	3.	299	t	+	3.	299	1.	100	12.5	1,247
W. Va.	2,538	1.	28	0.5	14	t	+	2.	55	2.	55	-	-	8.5	235
N. C.	5,198	2.	124	5.	309	-	-	1.	62	1.	62	2.	124	16.	990
S. C.	980	-	-	30.	445	3.	45	t	+	1.	15	-	-	34.	505
Ga.	805	-	-	20.	205	0.1	1	-	-	1.5	15	-	-	21.6	221
*Ky.	3,097	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenn.	3,636	5.	205	5.	205	t	+	1.	41	0.5	21	-	-	11.5	472

Wheat (Continued)

State	Production 1,000 Bushels	Scab %	Scab 1,000 Bushels	Leaf Rust %	Leaf Rust 1,000 Bushels	Stem Rust %	Stem Rust 1,000 Bushels	Bunt %	Bunt 1,000 Bushels	Loose Smut %	Loose Smut 1,000 Bushels	Foot Rots %	Foot Rots 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
*Ala.	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ark.	424	-	-	10.	48	t	+	-	-	1.	5	-	-	11.	53
*Okla.	33,080	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	10,010	t	+	2.	237	10.	1,185	0.5	59	1.	118	1.	118	15.5	1,835
Mont.	35,017	0	0	t	+	t	+	3.	1,161	0.5	193	6.	2,322	9.5	3,676
*Idaho	20,158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyo.	2,385	0	0	t	+	10.	271	2.	54	-	-	-	-	12.	325
Colo.	5,952	0	0	t	+	5.	334	5.	334	1.	67	t	+	11.	735
*N.Mex.	1,036	0	0	-	-	-	-	-	-	-	-	-	-	-	-
*Ariz.	836	0	0	-	-	-	-	-	-	-	-	-	-	-	-
*Utah	5,512	0	0	-	-	-	-	-	-	-	-	-	-	-	-
*Nev.	305	0	0	-	-	-	-	-	-	-	-	-	-	-	-
*Wash.	45,577	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Oreg.	15,551	0	0	t	+	t	+	2.	328	t	+	3.	492	5.1	836
*Calif.	13,592	0	0	-	-	-	-	-	-	-	-	-	-	-	-
U. S.	603,199	0.7	5,084	5.	34,960	23.	159,841	1.1	7,573	0.9	6,052	1.4	9,513	32.6	226,652

Column heading: Estimated reduction in yield of wheat due to diseases.

* Omitted in calculations for U. S. percentage loss.

Table 2. Estimated reduction in yield of barley due to stripe (Helminthosporium gramineum), spot blotch (Pyrenophora teres), loose smut (Ustilago spp.), covered smut (Ustilago hordei), scab (Gibberella saubinetii), stem rust (Puccinia graminis), and other diseases, 1935.

State	Production 1,000 Bushels	Estimated reduction in yield of barley due to diseases													
		Stripe		Spot Blotch		Loose Smut		Covered Smut		Scab		Stem Rust		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
*Maine	168	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Vt.	135	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mass.		t	+	-	-	t	+	t	+	t	+	5.	+	5.	+
N. Y.	4,158	0.7	33	-	-	-	-	6.5	304	4.	187	-	-	11.2	524
*N. J.	30	-	-	-	-	-	-	t	+	-	-	-	-	-	-
Pa.	1,595	0.1	2	1.	18	3.4	62	8.4	154	t	+	t	+	12.9	236
Ohio	450	-	-	-	-	1.	5	1.	5	2.	9	t	+	4.2	20
*Ind.	572	-	-	-	-	-	-	-	-	-	-	t	+	-	-
Ill.	1,813	0.5	11	0.1	2	3.2	68	0.5	11	9.	192	0.5	11	15.2	325
Mich.	5,326	t	+	t	+	0.2	11	0.2	11	0.2	11	t	+	1.	55
Wis.	25,878	1.	283	1.5	424	3.	848	0.5	141	1.5	424	t	+	8.5	2,403
Minn.	58,752	1.	778	t	+	1.	778	1.5	1,167	6.	4,669	15.	11,673	24.5	19,065
Iowa	15,444	1.	213	0.5	107	0.5	107	0.5	107	15.	3,195	10.	2,130	27.5	5,859
Mo.	1,254	t	+	t	+	9.	136	5.	76	3.	45	t	+	17.	257
N. D.	45,558	0.2	111	t	+	0.5	277	1.	554	t	+	15.	8,303	17.7	9,799
S. D.	43,130	2.	1,065	1.	532	4.	2,130	1.	532	3.	1,597	8.	4,260	19.	10,116
Nebr.	15,686	-	-	-	-	-	-	-	-	-	-	16.	2,988	16.	2,988
Kans.	4,538	-	-	-	-	2.	103	10.	516	-	-	-	-	12.	619
Md.	759	0.5	4	-	-	1.	8	4.	33	2.	17	t	+	8.	66
Va.	936	1.5	16	1.	10	3.	31	2.	21	1.	10	t	+	9.5	98
W. Va.	81	1.	1	-	-	2.	2	3.	3	-	-	-	-	10.	10
N. C.	254	2.	6	2.	6	1.	3	1.	3	1.	3	-	-	9.	27
S. C.		t	+	-	-	-	-	-	-	-	-	-	-	-	-
Ga.		-	-	-	-	4.	+	1.	+	-	-	-	-	5.	+
*Ky.	299	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenn.	306	1.	4	-	-	2.	8	7.	29	8.	33	-	-	25.	103
Ark.		-	-	-	-	2.	+	5.	+	-	-	-	-	7.	+

Barley (continued)

State	Production 1,000 Bushels	Estimated reduction in yield of barley due to diseases													
		Stripe		Spot Blotch		Loose Smut		Covered Smut		Scab		Stem Rust		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
*Okla.	1,485	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas.	2,646	0.1	3	0.1	3	1.	29	1.	29	1.	29	5.	146	9.2	268
Mont.	3,312	1.	35	0	0	1.	35	2.	69	0	0	[illegible]	0	4.	139
*Idaho	5,236	-	-	-	-	-	-	-	-	0	0	-	-	-	-
Wyo.	1,950	1.	21	-	-	t	+	3.	64	0	0	5.	107	9.	192
Colo.	5,436	1.	55	t	+	t	+	1.	55	0	0	t	+	2.	110
*N.Mex.	264	-	-	-	-	-	-	-	-	0	0	-	-	-	-
*Ariz.	910	-	-	-	-	-	-	-	-	0	0	-	-	-	-
*Utah	1,620	-	-	-	-	-	-	-	-	0	0	-	-	-	-
*Nev.	216	-	-	-	-	-	-	-	-	0	0	-	-	-	-
*Wash.	2,108	-	-	-	-	-	-	-	-	0	0	-	-	-	-
Oreg.	3,392	t	+	0.1	3	-	-	0.1	3	0	0	t	+	4.7	162
*Calif.	36,642	-	-	-	-	-	-	-	-	0	0	-	-	-	-
U. S.	292,249	0.9	2,641	0.4	1,105	1.6	4,641	1.3	3,837	3.5	10,421	10.	29,618	18.1	53,441

* Omitted in calculations for U. S. percentage loss.

Table 3. Estimated reduction in yield of rye due to smut (*Urocystis occulta*), ergot (*Claviceps purpurea*), leaf rust (*Puccinia rubigo-vera secalis*), stem rust (*P. graminis*), and other diseases, 1935.

State	Production 1,000 Bushels	Smut %	Smut 1,000 Bushels	Ergot %	Ergot 1,000 Bushels	Leaf Rust %	Leaf Rust 1,000 Bushels	Stem Rust %	Stem Rust 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Mass.		-	-	2.	+	3.	+	3.	+	8.	+
*N.Y.	345	-	-	-	-	-	-	-	-	-	-
*N.J.	315	-	-	-	-	-	-	-	-	-	-
Pa.	1,665	t	+	t	+	8.	153	t	+	13.	249
Ohio	1,320	-	-	0.1	1	1.	13	t	+	2.1	27
Ind.	2,358	-	-	-	-	15.	416	-	-	15.	416
Ill.	1,274	t	+	t	+	1.	13	t	+	1.5	19
Mich.	2,940	t	+	0.1	3	t	+	t	+	0.5	15
Wis.	4,082	t	+	t	+	0.5	21	t	+	0.7	29
Minn.	9,900	t	+	t	+	0	0	0	0	t	+
Iowa	2,077	-	-	1.	21	t	+	t	+	1.	21
*Mo.	600	-	-	-	-	-	-	-	-	-	-
N.D.	12,754	t	+	0.5	64	t	+	t	+	1.	128
S.D.	7,050	0	0	t	+	2.	144	t	+	2.	144
*Nebr.	7,250	-	-	-	-	-	-	-	-	-	-
*Kans.	682	-	-	-	-	-	-	-	-	-	-
*Del.	72	-	-	-	-	-	-	-	-	-	-
*Md.	240	-	-	-	-	-	-	-	-	-	-
Va.	540	-	-	t	+	2.5	14	t	+	2.5	14
W.Va.	150	t	+	t	+	0.5	1	-	-	0.5	1
N.C.	458	-	-	-	-	t	+	-	-	4.	19
*S.C.	72	-	-	-	-	-	-	-	-	-	-
Ga.	95	-	-	-	-	0.1	+	-	-	0.1	+
*Ky.	106	-	-	-	-	-	-	-	-	-	-
Tenn.	109	t	+	t	+	2.	2	-	-	12.	14
*Okla.	64	-	-	-	-	-	-	-	-	-	-
Texas	36	t	+	0	0	1.	+	t	+	2.	+
Mont.	620	0	0	t	+	0	0	0	0	t	+
*Idaho	50	-	-	-	-	-	-	-	-	-	-
Wyo.	144	-	-	-	-	-	-	t	+	t	+
Colo.	126	0	0	t	+	t	+	0	0	t	+
*Utah	45	-	-	-	-	-	-	-	-	-	-
*Wash.	98	-	-	-	-	-	-	-	-	-	-
Oreg.	299	0	0	t	+	t	+	t	+	0.1	+
U. S.	57,936	t	+	0.2	89	1.6	777	t	+	2.2	1,096

* Omitted in calculations for U. S. percentage loss.

Table 4. Estimated reduction in yield of oats due to smuts (Ustilago avenae and U. levis), stem rust (Puccinia graminis), crown rust (P. coronata), and other diseases, 1935.

State	Production	Estimated reduction in yield of oats due to diseases							
		Smuts		Stem rust		Crown rust		All Diseases	
	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
*Maine	3,996	-	-	-	-	-	-	-	-
*N. H.	351	-	-	-	-	-	-	-	-
*Vt.	1,876	-	-	-	-	-	-	-	-
Mass.	160	10.	18	3.	6	t	+	13.	24
*R. I.	68	-	-	-	-	-	-	-	-
*Conn.	330	-	-	-	-	-	-	-	-
N. Y.	25,742	9.5	2,827	-	-	4.	1,190	13.5	4,017
*N. J.	1,440	-	-	-	-	-	-	-	-
Pa.	26,013	15.	4,788	t	+	0.5	160	18.5	5,906
Ohio	45,684	5.	2,420	t	+	0.5	242	5.6	2,710
Ind.	38,610	1.	489	t	+	20.	9,775	21.	10,264
Ill.	107,716	2.6	3,449	t	+	5.	6,633	18.8	24,939
Mich.	43,818	1.5	671	t	+	t	+	1.7	894
Wis.	85,702	4.	3,896	t	+	8.	7,791	12.	11,687
Minn.	181,189	3.	5,723	1.	1,907	1.	1,907	5.	9,537
Iowa	205,137	1.	2,849	1.	2,849	20.	56,983	28.	79,776
Mo.	30,888	7.	2,637	1.	377	10.	3,767	18.	6,781
N. D.	54,575	1.	620	5.	3,101	5.	3,101	12.	7,442
S. D.	67,260	2.	1,401	t	+	2.	1,401	4.	2,802
*Nebr.	75,980	-	-	-	-	-	-	-	-
Kans.	41,022	4.	1,823	2.	912	4.	1,823	10.	4,558
*Del.	99	-	-	-	-	-	-	-	-
Md.	1,372	6.	89	t	+	2.	30	8.	119
Va.	2,442	3.5	91	1.5	39	1.	26	6.	156
W. Va.	2,044	5.	111	t	+	1.	22	8.	177
N. C.	4,730	1.	51	-	-	3.	153	7.	357
S. C.	9,768	10.	116	1.0	12	5.	58	16.	186
Ga.	7,298	2.	150	-	-	1.	75	3.	225
*Fla.	112	-	-	-	-	-	-	-	-
*Ky.	1,496	-	-	-	-	-	-	-	-
Tenn.	1,147	10.	135	-	-	5.	67	15.	202
*Ala.	1,881	-	-	-	-	-	-	-	-
*Miss.	600	-	-	-	-	-	-	-	-
Ark.	2,244	2.	95	0.8	38	50.	2,377	52.8	2,510
*La.	650	-	-	-	-	-	-	-	-
*Okla.	37,895	-	-	-	-	-	-	-	-
Texas	[illegible]	5.	2,386	10.	4,771	2.	954	18.	8,588
Mont.	8,272	5.	450	0	0	0	0	8.	720
*Idaho	5,168	-	-	-	-	-	-	-	-
Wyo.	3,562	6.	227	t	+	-	-	6.	227
Colo.	3,406	+	+	t	+	-	-	-	+
*N. Mex.	1,085	-	-	-	-	-	-	-	-
*Ariz.	378	-	-	-	-	-	-	-	-
*Utah	2,072	-	-	-	-	-	-	-	-
*Nev.	76	-	-	-	-	-	-	-	-
*Wash.	9,408	-	-	-	-	-	-	-	-
Oreg.	7,590	0.2	16	t	+	t	+	2.9	227
*Calif.	3,960	-	-	-	-	-	-	-	-
U. S.	1,1[illegible]5,435	3.	37,528	1.1	14,012	8.	98,535	14.9	1[illegible]5,031

* Omitted in calculations for U. S. percentage loss.

Table 5. Estimated reduction in yield of field corn due to smut (Ustilago zeae), root rots (various organisms), ear rots and stalk rots (various organisms other than Diplodia), ear and stalk rots (Diplodia zeae), bacterial wilt (Aplanobacter stewarti), and other diseases, 1935.

State	Production: 1,000 Bushels	Estimated reduction in yield of field corn due to diseases													
		Smut		Root Rots		Ear Rots (except Diplodia)		Stalk Rots (except Diplodia)		Diplodia		Bacterial Wilt		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
*Maine	520	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*N. H.	697	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Vt.	2,880	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mass.	1,599	4.	77	2.	39	t	+	t	+	1.	19	t	+	17.	328
*R. I.	369	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Conn.	2,160	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*N. Y.	22,032	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*N. J.	8,190	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	58,742	6.	4,461	t	+	10.	7,436	5.	3,718	t	+	t	+	21.	15,615
Ohio	133,980	8.	12,320	1.	1,540	2.	3,080	-	-	2.	3,080	-	-	13.	20,020
Ind.	153,444	1.	1,612	1.	1,612	1.	1,612	-	-	0.8	1,289	t	+	4.8	7,737
Ill.	288,382	2.3	8,417	4.	14,638	4.8	17,566	3.	10,797	1.1	4,025	t	+	21.2	77,583
Mich.	51,660	3.5	1,885	0.3	162	t	+	t	+	0.3	162	t	+	4.1	2,209
Wis.	78,608	1.5	1,317	t	+	4.	3,513	5.	4,392	t	+	t	+	10.5	9,222
Minn.	148,731	4.	6,363	2.	3,181	0.5	795	-	-	-	-	-	-	6.5	10,339
Iowa	352,425	2.	7,832	-	-	4.	15,663	-	-	4.	15,663	-	-	10.	39,158
Mo.	73,701	0.5	374	-	-	1.	748	t	+	t	+	-	-	1.5	1,122
N. D.	21,690	2.5	571	1.	228	0.5	114	1.	228	-	-	-	-	5.	1,141
S. D.	52,248	5.	2,779	-	-	1.	556	-	-	-	-	-	-	6.	3,335
*Nebr.	105,570	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kans.	34,560	1.	368	-	-	1.	368	2.	735	-	-	t	+	4.	1,471
*Del.	4,464	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Md.	18,935	0.5	104	5.	1,040	3.	624	-	-	0.5	104	t	+	9.	1,872
Va.	39,884	1.5	654	2.5	1,090	1.5	654	1.	436	-	-	2.	872	8.5	3,706
W. Va.	13,216	4.	622	3.	466	5.	777	1.	155	0.5	78	t	+	15.	2,331

Field Corn (Continued)

State	Production: 1,000 Bushels	Estimated reduction in yield of field corn due to diseases: Smut %	Smut 1,000 Bushels	Root Rots %	Root Rots 1,000 Bushels	Ear Rots (except Diplodia) %	Ear Rots (except Diplodia) 1,000 Bushels	Stalk Rots (except Diplodia) %	Stalk Rots (except Diplodia) 1,000 Bushels	Diplodia %	Diplodia 1,000 Bushels	Bacterial Wilt %	Bacterial Wilt 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
N. C.	49,780	5.	2,928	1.	586	2.	1,171	2.	1,171	t	+	-	-	15.	8,784
S. C.	25,592	0.5	148	10.	2,959	3.	888	-	-	t	+	-	-	13.5	3,995
Ga.	44,495	4.	1,854	-	-	-	-	-	-	-	-	-	-	4.	1,854
*Fla.	6,374	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Ky.	59,018	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenn.	51,760	2.	1,176	5.	2,941	3.	1,765	-	-	2.	1,176	-	-	12.	7,058
*Ala.	44,761	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Miss.	36,356	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ark.	26,000	1.	263	-	-	-	-	-	-	-	-	-	-	1.	263
*La.	23,922	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Okla.	31,158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	105,358	1.	1,158	2.	2,316	t	+	1.	1,158	1.	1,158	2.	2,316	9.	10,422
*Mont.	1,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Idaho	1,558	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Wyo.	2,519	t	+	-	-	-	-	-	-	-	-	-	-	t	+
Colo.	12,464	1.	126	0	0	0	0	0	0	0	0	0	0	1.	126
*N. Mex.	3,848	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Ariz.	720	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Utah	506	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Nev.	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Wash.	1,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oreg.	1,888	0.1	2	t	+	0	0	0	0	0	0	0	0	0.1	2
*Calif.	3,040	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U. S.	2,202,852	2.8	57,411	1.6	32,798	2.8	57,330	1.1	22,972	1.3	26,754	0.2	3,188	11.2	229,693

* Omitted in calculations for U. S. percentage loss.

Table 6. Sweet corn for manufacture; estimated reduction in yield of sweet corn due to smut (Ustilago zeae), bacterial wilt (Aplanobacter stewarti), stalk and ear rots (Diplodia zeae), and other diseases, 1935.

State	Production Short Tons	Estimated reduction in yield due to diseases: Smut %	Smut Short Tons	Bacterial Wilt %	Bacterial Wilt Short Tons	Diplodia %	Diplodia Short Tons	All Diseases %	All Diseases Short Tons
*Maine	50,000	-	-	-	-	-	-	-	-
*N. H.	2,700	-	-	-	-	-	-	-	-
*Vt.	3,100	-	-	-	-	-	-	-	-
Mass.		8.	+	t	+	2.	+	22.	+
Conn.		-	-	t	+	-	-	t	+
N. Y.	50,400	5.	2,653	-	-	-	-	5.	2,653
Pa.	10,200	7.	992	15.	2,125	5.	708	28.	3,967
*Ohio	55,400	-	-	-	-	-	-	-	-
Ind.	84,500	5.	5,030	5.	5,030	6.	6,036	16.	16,096
*Ill.	198,000	-	-	-	-	-	-	-	-
Mich.	7,200	5.	380	t	+	t	+	5.2	395
Wis.	38,000	7.	3,075	t	+	6.5	2,855	13.5	5,930
Minn.	151,800	4.	6,494	-	-	0.5	812	6.5	10,553
Iowa	105,600	5.	5,677	-	-	2.	2,271	7.	7,948
S. D.		6.	+	-	-	-	-	6.	+
*Nebr.	4,500	-	-	-	-	-	-	-	-
*Del.	7,300	-	-	-	-	-	-	-	-
Md.	60,500	1.	676	1.5	1,014	-	-	10.5	7,098
Va.		1.	+	2.5	+	0.5	+	4.	+
W. Va.		3.	+	5.	+	1.	+	12.	+
Tenn.	7,100	2.	145	-	-	-	-	2.	145
Oreg.		0	0	0	0	0	0	0.1	+
**Other States	18,300	-	-	-	-	-	-	-	-
U. S.	854,600	4.4	25,122	1.4	8,169	2.2	12,682	9.6	54,785

* Omitted in calculations for U. S. percentage loss.

** Includes Colorado, Idaho, Kansas, Kentucky, Missouri, Montana, Oklahoma, Oregon, South Dakota, Virginia, Washington and Wyoming.

Table 7. Estimated reduction in yield of sweet potato due to stem rot (_Fusarium_ spp.), black rot (_Ceratostomella fimbriata_), and other diseases, and estimated loss from storage rots (various organisms), 1935.

State	Production 1,000 Bushels	Estimated reduction in yield due to diseases							
		Stem Rot		Black Rot		All Diseases		Storage Rots	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Conn.		-	-	-	-	1.	+	-	-
*N. J.	2,100	-	-	-	-	-	-	-	-
Pa.		t	+	t	+	1.	+	2.	+
Ind.	392	3.	12	1.	4	4.	16	-	-
*Ill.	600	-	-	-	-	-	-	-	-
Iowa	285	4.	13	5.	16	9.	29	15.	50
*Mo.	900	-	-	-	-	-	-	-	-
Kans.	350	5.	19	t	+	6.	23	4.	15
*Del.	840	-	-	-	-	-	-	-	-
Md.	840	2.	18	2.5	23	8.	73	7.	63
Va.	4,060	7.	306	t	+	7.	306	15.	716
N. C.	8,000	8.	719	1.	90	11.	989	20.	2,000
S. C.	5,192	t	+	5.	288	10.	576	15.	916
*Ga.	8,010	-	-	-	-	-	-	-	-
*Fla.	1,870	-	-	-	-	-	-	-	-
*Ky.	1,760	-	-	-	-	-	-	-	-
Tenn.	4,720	4.	207	5.	259	9.	466	10.	524
*Ala.	6,900	-	-	-	-	-	-	-	-
*Miss.	5,883	-	-	-	-	-	-	-	-
Ark.	1,820	2.	38	2.	38	4.	76	10.	202
*La.	6,512	-	-	-	-	-	-	-	-
*Okla.	1,080	-	-	-	-	-	-	-	-
Texas	6,390	0.1	8	10.	800	20.1	1,608	15.	1,128
*Calif.	1,344	-	-	-	-	-	-	-	-
U. S.	69,853	2.7	1,340	3.1	1,518	8.5	4,162	11.1	5,614

* Omitted in calculations for U. S. percentage loss.

Table 8. Estimated reduction in yield of potato due to mosaic (virus), leaf roll (virus), late blight (*Phytophthora infestans*), Rhizoctonia (*Corticium vagum*).

State	Production: 1,000 Bushels	Estimated reduction in yield due to diseases							
		Mosaic		Leaf Roll		Late Blight		Rhizoctonia	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Maine	38,640	5.	2,760	3.	1,656	8.	4,416	8.	4,416
*N. H.	1,200	-	-	-	-	-	-	-	-
Vt.	1,840	3.	69	3.	69	6.	138	5.	115
Mass.	1,760	3.	72	3.	72	3.	72	8.	193
*R. I.	735	-	-	-	-	-	-	-	-
Conn.	1,980	1.	21	-	-	0.5	10	0.5	10
N. Y.	21,450	-	-	3.	870	5.	1,449	5.	1,449
*N. J.	9,750	-	-	-	-	-	-	-	-
Pa.	22,572	3.	989	8.	2,636	8.	2,636	3.	989
Ohio	12,826	0.5	80	5.	802	t	+	3.	481
*Ind.	5,280	-	-	-	-	-	-	-	-
*Ill	4,050	-	-	-	-	-	-	-	-
Mich.	24,985	0.2	56	1.	279	t	+	1.	279
Wis.	20,746	t	+	0	0	0	0	t	+
Minn.	28,390	5.	1,918	-	-	0	0	4.	1,535
Iowa	6,300	12.	1,096	5.	457	0	0	3.	274
*Mo.	4,212	-	-	-	-	-	-	-	-
N. D.	13,500	1.	145	1.	145	-	-	1.5	217
S. D.	3,400	1.	41	0.2	8	0	0	5.	204
*Nebr.	8,694	-	-	-	-	-	-	-	-
Kans.	2,625	t	+	-	-	t	+	10.	328
*Del.	500	-	-	-	-	-	-	-	-
Md.	3,135	2.	80	2.5	100	5.	201	3.	121
Va.	11,352	2.	307	2.	307	0	0	1.	153
W. Va.	2,924	3.	135	10.	450	3.	135	5.	225
N. C.	9,130	1.	111	4.	445	1.	111	2.	223
S. C.	1,926	t	+	-	-	-	-	3.	61
Ga.	1,365	3.	52	0.1	2	0.1	2	1.	17
Fla.	2,288	1.	27	-	-	t	+	4.	106
*Ky.	5,762	-	-	-	-	-	-	-	-
Tenn.	4,446	2.	102	t	+	-	-	1.	51
*Ala.	3,230	-	-	-	-	-	-	-	-
*Miss.	1,136	-	-	-	-	-	-	-	-
*Ark.	3,476	-	-	-	-	-	-	-	-
*La.	2,856	-	-	-	-	-	-	-	-
*Okla.	2,840	-	-	-	-	-	-	-	-
Texas	3,240	2.	76	0.1	4	t	+	2.	76
Mont.	1,955	5.	114	t	+	0	0	3.	68
*Idaho	17,800	-	-	-	-	-	-	-	-
Wyo.	2,430	5.	150	-	-	-	-	3.	90
Colo.	15,120	t	+	t	+	0	0	1.	156
*N. Mex.	490	-	-	-	-	-	-	-	-
*Ariz.	150	-	-	-	-	-	-	-	-
*Utah	2,040	-	-	-	-	-	-	-	-
*Nev.	450	-	-	-	-	-	-	-	-
*Wash.	6,270	-	-	-	-	-	-	-	-
Oreg.	4,810	10.	697	4.	279	-	-	5.	349
*Calif.	10,350	-	-	-	-	-	-	-	-
U. S.	356,406	2.6	9,098	2.5	8,581	2.6	9,170	3.5	12,186

Potato - (Continued). Blackleg, (*Bacillus phytophthorus*), Fusarium wilt (*Fusarium* spp.), tipburn and hopperburn (non-parasitic and leaf hopper), early blight (*Alternaria solani*), scab (*Actinomyces scabies*), and other diseases, 1935.

State	Estimated reduction in yield due to diseases											
	Blackleg		Fusarium Wilt		Tipburn and Hopperburn		Early Blight		Scab		All Diseases	
	%	1,000 Bushels	%	1,000 Pushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Maine	2.	1,104	0	0	-	-	0	0	4.	2,208	30.	16,560
N.H.	t	+	-	-	-	-	-	-	-	-	-	-
Vt.	t	+	-	-	3.	69	-	-	-	-	20.	460
Mass.	t	+	t	+	4.	96	3.	72	1.	24	27.	649
R.I.	-	-	-	-	-	-	-	-	-	-	-	-
Conn.	0.5	10	-	-	2.	43	t	+	0.5	10	5.	104
N.Y.	t	+	-	-	10.	2,899	t	+	3.	870	26.	7,537
N.J.	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	t	+	2.	659	2.	659	t	+	0.5	165	31.5	10,381
Ohio	2.	321	1.	160	5.	802	2.	321	0.5	80	20.	3,207
Ind.	-	-	-	-	-	-	-	-	-	-	-	-
Ill.	-	-	-	-	-	-	-	-	-	-	-	-
Mich.	1.5	418	1.	279	3.5	975	0.3	84	1.5	418	10.3	2,872
Wis.	0.5	124	t	+	5.	1,242	5.	1,242	5.	1,242	16.5	4,098
Minn.	1.	384	4.	1,535	5.	1,918	1.	384	1.	384	26.	9,976
Iowa	1.	91	-	-	5.	457	t	+	5.	457	31.	2,832
Mo.	-	-	-	-	-	-	-	-	-	-	-	-
N.D.	2.	290	1.	145	0.2	29	t	+	t	+	6.7	970
S.D.	0.5	20	2.	82	1.	41	0	0	2.	82	16.7	682
Nebr.	-	-	-	-	-	-	-	-	-	-	-	-
Kans.	t	+	t	+	-	-	-	-	t	+	20.	656
Del.	-	-	-	-	-	-	-	-	-	-	-	-
Md.	t	+	3.	121	1.	40	1.	40	4.	161	22.	884
Va.	1.	153	1.	153	5.	767	1.	153	3.	460	16.	2,453
W.Va.	2.	90	1.5	67	7.5	337	t	+	t	+	35.	1,574
N.C.	2.	223	1.	111	2.	223	2.	223	-	-	18.	2,004
S.C.	-	-	-	-	-	-	t	+	t	+	5.	102
Ga.	2.	35	-	-	5.	87	10.	173	-	-	21.2	368
Fla.	0.5	13	-	-	-	-	t	+	0.5	13	14.	372
Ky.	-	-	-	-	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	5.	254	4.	203	0.5	25	12.5	635
Ala.	-	-	-	-	-	-	-	-	-	-	-	-
Miss.	-	-	-	-	-	-	-	-	-	-	-	-
Ark.	-	-	-	-	-	-	-	-	-	-	-	-
La.	-	-	-	-	-	-	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-	-	-
Texas	0.1	4	1.	38	0.5	19	1.	38	5.	190	14.7	559
Mont.	t	+	2.	45	t	+	t	+	2.	45	14.	317
Idaho	-	-	-	-	-	-	-	-	-	-	-	-
Wyo.	2.	60	5.	150	-	-	t	+	2.	60	19.	570
Colo.	0	0	2.	312	0	0	t	+	t	+	3.	468
N.M.	-	-	-	-	-	-	-	-	-	-	-	-
Ariz.	-	-	-	-	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-	-	-	-	-
Wash.	-	-	-	-	-	-	-	-	-	-	-	-
Oreg.	3.	209	2.	139	3.	209	-	-	4.	279	31.	2,161
Calif.	-	-	-	-	-	-	-	-	-	-	-	-
U. S.	1.	3,548	1.1	3,996	3.2	11,166	0.8	2,933	2.1	7,173	21.	73,451

Table 9. Tomatoes for manufacture; estimated reduction in yield due to blight (Septoria lycopersici), Fusarium wilt (Fusarium lycopersici), early blight (Alternaria solani), nailhead spot (Macrosporium tomato), blossom-end rot (non-parasitic), curly-top (virus), and other diseases, 1935.

State	Production Short Tons°	Estimated reduction in yield due to diseases: Septoria Blight %	Septoria Blight Short Tons	Fusarium Wilt %	Fusarium Wilt Short Tons	Bacterial Wilt %	Bacterial Wilt Short Tons	Early Blight %	Early Blight Short Tons	Nailhead Spot %	Nailhead Spot Short Tons	Blossom-end Rot %	Blossom-end Rot Short Tons	Curly-top %	Curly-top Short Tons	All Diseases %	All Diseases Short Tons
Mass.		0.5	+	t	+	1.	+	7.	+	-	-	2.	+	0	0	16.5	+
Conn.		t	+	-	-	-	-	1.	+	-	-	0.5	+	0	0	5.5	+
*N.Y.	127,000	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
*N.J.	155,000	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
Pa.	54,200	4.	2,891	1.	723	-	-	2.	1,445	-	-	10.	7,227	0	0	25.	18,067
Ohio	81,600	4.	4,352	2.	2,176	0.5	544	15.	16,320	0.5	544	1.	1,088	0	0	25.	27,200
Ind.	350,300	-	-	1.	371	-	-	4.5	1,668	-	-	-	-	0	0	5.5	2,039
Ill.	30,700	15.	10,709	5.	3,570	t	+	-	-	1.	714	1.	714	0	0	57.	40,695
Mich.	17,600	1.	207	1.	207	0	0	t	+	-	-	t	+	0	0	15.	3,106
Wis.		5.	+	t	+	t	+	15.	+	t	+	t	+	0	0	20.	+
Minn.		t	+	0	0	0	0	t	+	0	0	4.	+	0	0	5.	+
Iowa	11,200	3.	373	-	-	-	-	4.	498	0	0	1.	124	0	0	10.	1,244
*Mo.	18,000	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
N.D.		t	+	t	+	t	+	t	+	-	-	1.	+	0	0	2.	+
Kans.		0	0	0	0	-	-	-	-	-	-	-	-	0	0	-	-
*Del.	49,000	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
Md.	225,000	0.5	1,669	0.5	1,669	-	-	8.	26,706	-	-	0.2	668	0	0	32.6	108,828
Va.	82,500	3.	5,357	10.	17,857	2.	3,571	10.	17,857	-	-	t	+	0	0	30.	53,571
W.Va.		1.5	+	3.	+	-	-	t	+	0.5	+	2.	+	0	0	12.	+
N.C.		2.	+	8.	+	5.	+	2.	+	-	-	5.	+	0	0	30.	+
Ga.		1.	+	5.	+	1.	+	0.1	+	-	-	10.	-	0	0	17.1	+
Fla.		-	-	3.	+	-	-	-	-	t	+	-	-	0	0	5.	+
*Ky.	14,000	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
Tenn.	21,800	8.	2,725	10.	3,406	-	-	12.	4,088	1.	341	5.	1,703	0	0	36.	12,263
*Ark.	21,000	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
Texas		1.	+	3.	+	0.1	+	0.1	+	0	0	4.	+	0	0	18.2	+

Tomatoes (Continued)

State	Production Short Tons°	Estimated reduction in yield due to diseases															
		Septoria Blight		Fusarium Wilt		Bacterial Wilt		Early Blight		Nailhead Spot		Blossom-end Rot		Curly-top		All Diseases	
		%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons
Mont.		0	0	t	+	0	0	0	0	0	0	t	+	2.	+	5.	+
Idaho		0	0	-	-	0	0	0	0	-	-	-	-	35.	+	35.	+
Colo.	17,000	0	0	t	+	0	0	0	0	-	-	t	+	1.	172	1.	172
Utah	32,800	0	0	t	+	0	0	0	0	-	-	-	-	47.	33,153	53.5	37,738
Oreg.		0	0	-	-	0	0	0	0	2.	+	8.	+	40.	+	85.	+
Calif.	283,200	0	0	-	-	0	0	0	0	-	-	-	-	-	-	-	-
**Other States	81,500																
U. S.	1,673,400	1.9	28,283	2.	29,979	0.3	4,115	4.5	58,582	0.1	1,599	0.8	11,524	2.2	33,325	20.2	304,923

° Short tons, 2,000 lbs.

* Omitted in calculations for U. S. percentage loss.

** Includes Connecticut, Florida, Georgia, Idaho, Kansas, Louisiana, Minnesota, Mississippi, Nebraska, New Mexico, North Carolina, Oklahoma, Oregon, South Carolina, Texas, Washington, West Virginia, and Wisconsin.

Table 10. Tomatoes for market; estimated reduction in yield due to blight (Septoria lycopersici), Fusarium wilt (Fusarium lycopersici), early blight (Alternaria solani), nailhead spot (Macrosporium tomato), blossom-end rot (non-parasitic), curly-top (virus), and other diseases, 1935.

State	Production 1,000 Bushels	Septoria Blight %	Septoria Blight 1,000 Bushels	Fusarium Wilt %	Fusarium Wilt 1,000 Bushels	Bacterial Wilt %	Bacterial Wilt 1,000 Bushels	Early Blight %	Early Blight 1,000 Bushels	Nailhead Spot %	Nailhead Spot 1,000 Bushels	Blossom-end Rot %	Blossom-end Rot 1,000 Bushels	Curly-top %	Curly-top 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Mass.		0.5	+	t	+	1.	+	7.	+	-	-	2.	+	0	0	16.5	+
Conn.		t	+	-	-	-	-	1.	+	-	-	0.5	+	0	0	5.5	+
*N.Y.	1,494	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
*N.J.	2,000	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
Pa.	128	4.	7	1.	2	-	-	2.	3	-	-	10.	17	0	0	25.	43
Ohio	541	4.	29	2.	14	0.5	4	15.	108	0.5	4	1.	7	0	0	25.	180
Ind.	580	-	-	1.	6	-	-	4.5	28	-	-	-	-	0	0	5.5	34
Ill.	247	15.	86	5.	29	t	+	-	-	1.	6	1.	6	0	0	57.	328
Mich.	420	1.	5	1.	5	0	0	t	+	-	-	t	+	0	0	15.	74
Wis.		0.5	+	t	+	t	+	15.	+	t	+	t	+	0	0	15.5	+
Minn.		t	+	0	0	0	0	t	+	0	0	4.	+	0	0	5.	+
Iowa	54	3.	2	-	-	-	-	4.	2	0	0	1.	1	0	0	10.	6
*Mo.	768	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
N.D.		t	+	t	+	t	+	t	+	-	-	1.	+	0	0	2.	+
Kans.		0	0	0	0	-	-	-	-	-	-	-	-	0	0	0	0
*Del.	29	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
Md.	585	0.5	4	0.5	4	-	-	8.	69	-	-	0.2	2	0	0	32.6	282
Va.	450	2.	13	10.	63	2.	13	10.	63	-	-	t	+	0	0	29.	184
W.Va.		1.5	+	3.	+	-	-	t	+	0.5	+	2.	+	0	0	12.	+
N.C.	72	2.	2	8.	8	5.	5	2.	2	-	-	5.	5	0	0	30.	30
S.C.	272	t	+	5.	18	t	+	15.	54	-	-	5.	18	0	0	25.	90
Ga.	96	1.	1	5.	6	1.	1	0.1	+	-	-	10.	12	0	0	17.1	20
Fla.	2,709	-	-	3.	86	-	-	-	-	t	+	-	-	0	0	5.	143
*Ky.	240	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
Tenn.	886	8.	111	10.	138	-	-	12.	166	1.	14	5.	69	0	0	36.	498
*Miss.	1,024	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-

Tomatoes (Continued)

State	Production 1,000 °Bushels	Septoria Blight %	Septoria Blight 1,000 Bushels	Fusarium Wilt %	Fusarium Wilt 1,000 Bushels	Bacterial Wilt %	Bacterial Wilt 1,000 Bushels	Early Blight %	Early Blight 1,000 Bushels	Nailhead Spot %	Nailhead Spot 1,000 Bushels	Blossom-end Rot %	Blossom-end Rot 1,000 Bushels	Curly-top %	Curly-top 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
*Ark.	240	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
*La.	114	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-
Texas	2,298	1.	28	3.	84	0.1	3	0.1	3	0	0	4.	112	0	0	18.2	511
Mont.		0	0	t	+	0	0	0	0	0	0	t	+	2.	+	5.	+
Idaho		0	0	-	-	0	0	0	0	-	-	-	-	35.	+	35.	+
Colo.	451	0	0	t	+	0	0	0	0	0	0	t	+	1.	5	2.	10
Utah	94	0	0	t	+	0	0	0	0	0	0	-	-	47.	95	53.5	108
*Wash.	270	0	0	-	-	0	0	0	0	-	-	-	-	-	-	-	-
Oreg.	175	0	0	-	-	0	0	0	0	2.	23	8.	93	40.	467	85.	991
*Calif.	2,666	0	0	-	-	0	0	0	0	-	-	-	-	-	-	-	-
U. S.	18,903	2.1	288	3.4	463	0.2	26	3.7	498	0.3	47	2.5	342	4.2	567	26.	3,532

°Bushels of 53 lbs.
*Omitted in calculations for U. S. percentage loss.

Table 11. Snap beans for manufacture; estimated reduction in yield due to Anthracnose (Colletotrichum lindemuthianum), bacterial blights (Bacterium spp.), mosaic (virus), root rots (various organisms), rust (Uromyces phaseoli typica), and other diseases, 1935.

State	Production Short Tons	Reduction in yield due to diseases											
		Anthracnose		Bacterial Blights		Mosaic		Root Rots		Rust		All Diseases	
		%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons
*Maine	2,700	-	-	-	-	-	-	-	-	-	-	-	-
Mass.		t	+	3.	+	3.	+	10.	+	t	+	16.	+
*N.Y.	12,600	-	-	-	-	-	-	-	-	t	+	-	-
Pa.	1,800	6.	126	1.	21	0.5	11	6.	126	t	+	14.5	305
Ohio		0.5	+	2.	+	0.5	+	1.	+	-	-	5.	+
*Ind.	3,800	-	-	-	-	-	-	-	-	-	-	-	-
Ill.		1.	+	2.	+	25.	+	-	-	-	-	30.	+
Mich.	8,000	t	+	2.5	212	t	+	0.5	43	t	+	5.8	492
Wis.	10,100	0	0	t	+	5.	532	t	+	0	0	5.	532
Minn.		t	+	3.	+	2.	+	t	+	0	0	6.	+
N.D.		t	+	0.5	+	2.	+	t	+	t	+	2.5	+
*Del.	1,400	-	-	-	-	-	-	-	-	-	-	-	-
Md.	13,300	t	+	1.5	209	0.2	28	3.	419	-	-	4.7	656
Va.		t	+	5.	+	4.	+	2.	+	t	+	36.	+
W.Va.		3.	+	3.	+	1.	+	2.	+	0.5	+	11.	+
N.C.		-	-	1.	+	2.	+	7.	+	-	-	18.	+
S.C.	200	0	0	t	+	t	+	5.	11	t	+	5.	11
Ga.		0.1	+	1.	+	-	-	-	-	1.	+	2.1	+
Tenn.	1,700	-	-	1.	18	2.	35	-	-	1.	18	4.	71
*Miss.	1,200	-	-	-	-	-	-	-	-	-	-	-	-
*Ark.	1,500	-	-	-	-	-	-	-	-	-	-	-	-
*La.	600	-	-	-	-	-	-	-	-	-	-	-	-
Texas		t	+	5.	+	1.	+	5.	+	t	+	13.	+
Mont.		0	0	2.	+	5.	+	1.	+	t	+	8.	+
Wyo.		0	0	6.5	+	6.	+	5.	+	-	-	17.5	+
Colo.	2,900	0	0	1.5	47	3.	93	2.	62	0	0	6.5	202
*Utah	1,900	0	0	-	-	-	-	-	-	-	-	-	-
*Wash.	2,000	0	0	-	-	-	-	-	-	-	-	-	-
Oreg.	6,200	0	0	-	-	5.	344	-	-	-	-	10.	688
*Calif	2,800	0	0	-	-	-	-	-	-	-	-	-	-
**Other States	5,500												
U. S.	80,200	0.3	126	1.1	507	2.2	1,043	1.4	661	+	18	6.2	2,957

* Omitted in calculations for U. S. percentage loss.

** Includes Alabama, Florida, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, North Carolina, Ohio, Oklahoma, Texas, Vermont, Virginia, West Virginia, Wyoming.

Table 12. Snap beans for market; estimated reduction in yield due to Anthracnose (Colletotrichum lindemuthianum), bacterial blights (Bacterium spp.), mosaic (virus), root rots (various organisms), rust (Uromyces phaseoli typica), and other diseases, 1935.

State	Production 1,000 °Bushels	Anthracnose %	Anthracnose 1,000 Bushels	Bacterial Blights %	Bacterial Blights 1,000 Bushels	Mosaic %	Mosaic 1,000 Bushels	Root Rots %	Root Rots 1,000 Bushels	Rust %	Rust 1,000 Bushels	All Diseases %	All Diseases 1,000 Bushels
Mass.		t	+	3.	+	3.	+	10.	+	t	+	16.	+
Conn.		-	-	-	-	-	-	-	-	-	-	2.	+
*N.Y.	242	-	-	-	-	-	-	-	-	t	+	-	-
*N.J.	1,189	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	414	6.	29	1.	5	0.5	+	6.	29	t	+	14.5	68
Ohio		0.5	+	2.	+	0.5	+	1.	+	-	-	5.	+
Ill.	32	1.	1	2.	1	25.	11	-	-	-	-	30.	14
Mich.	68	t	+	2.5	2	t	+	0.5	+	t	+	5.8	4
Wis.		0	0	t	+	5.	+	t	+	0	0	5.	+
Minn.		t	+	3.	+	2.	+	t	+	0	0	6.	+
N.D.		t	+	0.5	+	2.	+	t	+	t	+	2.5	+
*Del.	8	-	-	-	-	-	-	-	-	-	-	-	-
Md.	208	t	+	1.5	3	0.2	+	3.	7	-	-	4.7	10
Va.	331	0	0	5.	25	2.	10	2.	10	t	+	34.	170
W.Va.		3.	+	3.	+	1.	+	2.	+	0.5	+	11.	+
N.C.	664	-	-	1.	8	2.	16	7.	55	-	-	18.	142
S.C.	318	0	0	t	+	t	+	5.	17	t	+	5.	17
Ga.	288	0.1	+	1.	3	-	-	-	-	1.	3	2.1	6
*Fla.	5,069	-	-	-	-	-	-	-	-	-	-	-	-
Tenn.	81	-	-	1.	1	2.	2	-	-	1.	1	4.	4
*Ala.	64	-	-	-	-	-	-	-	-	-	-	-	-
*Miss.	299	-	-	-	-	-	-	-	-	-	-	-	-
*Ark.	78	-	-	-	-	-	-	-	-	-	-	-	-
*La.	607	-	-	-	-	-	-	-	-	-	-	-	-
Texas	383	t	+	5.	22	1.	4	5.	22	t	-	13.	57
Mont.		0	0	2.	+	5.	+	1.	+	t	+	8.	+
Wyo.		0	0	6.5	+	6.	+	5.	+	-	-	17.5	+
Colo.	333	0	0	1.5	5	3.	11	2.	7	0	0	6.5	23
Oreg.		0	0	-	-	5.	+	-	-	-	-	10.	+
*Calif	1,148	0	0	-	-	-	-	-	-	-	-	-	-
U. S.	11,824	0.8	30	2.1	75	1.5	54	4.1	147	-	-	14.1	515

° Bushels of 30 pounds.

* Omitted in calculations for U. S. percentage loss.

Table 13. Estimated reduction in yield of dry beans due to anthracnose (Colletotrichum lindemuthianum), bacterial blights (Bacterium spp.), mosaic (virus), root rots (various organisms), rust (Uromyces phaseoli typica), and other diseases, 1935.

State	Production 1,000 °Bags	Reduction in yield of dry beans due to diseases											
		Anthracnose		Bacterial Blight		Mosaic		Root Rots		Rust		All Diseases	
		%	1,000 Bags	%	1,000 Bags	%	1,000 Bags	%	1,000 Bags	%	1,000 Bags	%	1,000 Bags
*Maine	67	-	-	-	-	-	-	-	-	-	-	-	-
*Vt.	17	-	-	-	-	-	-	-	-	-	-	-	-
*N.Y.	874	-	-	-	-	-	-	-	-	-	-	-	-
Mich.	4,806	t	+	2.5	128	t	+	0.5	26	t	+	5.8	297
Wis.	22	0	0	t	+	5.	1	t	+	0	0	5.	1
Minn.	25	t	+	3.	1	2.	1	t	+	0	0	6.	2
*Nebr.	104	-	-	-	-	-	-	-	-	-	-	-	-
*Kans.	21	-	-	-	-	-	-	-	-	-	-	-	-
Mont.	551	0	0	2.	12	5.	30	1.	6	t	+	8.	48
*Idaho	1,306	-	-	-	-	-	-	-	-	-	-	-	-
Wyo.	410	0	0	3.	14	4.	18	2.5	11	-	-	9.5	43
Colo.	1,256	0	0	1.5	20	3.	40	2.	27	0	0	6.5	87
*N.M.	302	0	0	-	-	-	-	-	-	-	-	-	-
*Ariz.	66	0	0	-	-	-	-	-	-	-	-	-	-
Oreg.	6	0	0	-	-	5.	+	-	-	-	-	10.	+
*Calif	3,966	0	0	-	-	-	-	-	-	-	-	-	-
U. S.	13,799	-	-	2.3	175	1.2	90	0.9	70	-	-	6.3	478

° Bags of 100 pounds.

* Omitted in calculations for U. S. percentage loss.

Table 14. Green peas for manufacture; estimated reduction in yield due to bacterial blight (*Bacterium pisi*), Fusarium wilt (*Fusarium orthoceras pisi*), Ascochyta blight (*Mycosphaerella pinodes* and *Ascochyta* spp.), root rots (various organisms), and other diseases, 1935.

State	Production Short Tons	Estimated reduction in yield due to diseases									
		Bacterial Blight		Fusarium Wilt		Ascochyta Blight		Root Rots		All Diseases	
		%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons	%	Short Tons
*Maine	2,750	-	-	-	-	-	-	-	-	-	-
*N.Y.	23,600	-	-	-	-	-	-	-	-	-	-
Pa.	4,340	-	-	1.	55	t	+	20.	1,099	21.	1,154
Ohio	4,250	0.5	24	1.	47	1.	47	5.	236	10.	472
*Ind.	8,500	-	-	-	-	-	-	-	-	-	-
Ill.	10,350	1.	111	1.	111	-	-	5.	556	7.	778
Mich.	8,840	t	+	0	0	t	+	5.	466	5.1	475
Wis.	75,640	t	+	0.5	398	0	0	3.	2,389	5.	3,981
*Minn.	26,540	-	-	-	-	-	-	-	-	-	-
*Del.	4,420	-	-	-	-	-	-	-	-	-	-
Md.	21,740	0.2	49	t	+	0.5	122	10.	2,435	10.7	2,606
Va.	7,540	t	+	2.	154	-	-	-	-	2.	154
Tenn.		-	-	-	-	2.	+	-	-	2.	+
Mont.	2,950	1.	33	t	+	t	+	10.	331	11.	364
*Wyo.		t	+	t	+	-	-	-	-	t	+
Colo.	3,630	1.	42	2.	84	t	+	10.	422	14.	590
*Utah	21,010	-	-	-	-	-	-	-	-	-	-
*Wash.	15,000	-	-	-	-	-	-	-	-	-	-
Oreg.	7,000	-	-	2.	250	2.	250	40.	5,000	44.	5,500
**Other States	16,010										
U. S.	265,090	0.1	259	0.6	1,099	0.2	419	7.	12,934	8.5	16,071

* Omitted in calculations for U. S. percentage loss.

** Includes California, Idaho, Iowa, Kansas, Nebraska, New Jersey, Oklahoma, Tennessee, and Wyoming.

Table 15. Green peas for market; estimated reduction in yield due to bacterial blight (Bacterium pisi), Fusarium wilt (Fusarium orthoceras pisi), Ascochyta blight (Mycosphaerella pinodes and Ascochyta spp.), root rots (various organisms), and other diseases, 1935

State	Production 1,000 °Bushels	Estimated reduction in yield due to diseases									
		Bacterial Blight		Fusarium Wilt		Ascochyta Blight		Root Rots		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Mass.		2.	+	2.	+	1.	+	25.	+	50.	+
*N.Y.	554	-	-	-	-	-	-	-	-	-	-
*N.J.	408	-	-	-	-	-	-	-	-	-	-
Pa.		-	-	1.	+	t	+	20.	+	21.	+
Ohio		0.5	+	1.	+	1.	+	5.	+	10.	+
Ill.		1.	+	1.	+	-	-	5.	+	7.	+
Mich.		t	+	0	0	t	+	5.	+	5.1	+
Wis.		t	+	0.5	+	0	0	3.	+	4.	+
N.D.		-	-	t	+	-	-	t	+	t	+
Md.	15	0.2	+	t	+	0.5	+	3.	+	3.7	+
Va.	144	t	+	2.	3	-	-	-	-	2.	3
N.C.	228	1.	3	2.	6	1.	3	3.	10	9.	28
S.C.	160	-	-	0	0	5.	9	10.	19	15.	28
Ga.		2.	+	-	-	10.	+	-	-	12.	+
*Fla.	400	-	-	-	-	-	-	-	-	-	-
Tenn.		-	-	-	-	2.	+	-	-	2.	+
*Ala.	11	-	-	-	-	-	-	-	-	-	-
*Miss.	104	-	-	-	-	-	-	-	-	-	-
*La.	58	-	-	-	-	-	-	-	-	-	-
Texas	25	t	+	0.1	+	0	0	2.	1	3.1	1
Mont.		1.	+	t	+	t	+	10.	+	11.	+
*Idaho	238	-	-	-	-	-	-	-	-	-	-
Wyo.		t	+	t	+	-	-	-	-	t	+
Colo.	837	1.	10	2.	19	t	+	10.	97	14.	136
*Ariz.	22	-	-	-	-	-	-	-	-	-	-
*Wash.	578	-	-	-	-	-	-	-	-	-	-
Oreg.	83	-	-	2.	3	2.	3	40.	59	44.	65
*Calif.	4,506	-	-	-	-	-	-	-	-	-	-
U. S.	8,371	0.2	13	0.5	31	0.2	15	3.	186	4.1	261

° Bushels of 30 pounds.

* Omitted in calculations for U. S. percentage loss.

Table 16. Estimated reduction in yield of cotton due to Anthracnose. (*Glomerella gossypii*), angular leaf spot (*Bacterium malvacearum*), wilt (*Fusarium vasinfectum*), root knot (*Heterodera marioni*), root rot (*Phymatotrichum omnivorum*), malnutrition (non-parasitic), and other diseases, 1935.

State	Production 1,000 Bales	Estimated reduction in yield due to diseases													
		Anthracnose		Angular Leaf Spot		Wilt		Root Knot		Root Rot		Malnutrition		All Diseases	
		%	1,000 Bales	%	1,000 Bales	%	1,000 Bales	%	1,000 Bales	%	1,000 Bales	%	1,000 Bales	%	1,000 Bales
*Mo.	200	-	-	-	-	-	-	-	-	0	0	-	-	-	-
Va.	30	3.	1	4.	1	-	-	-	-	0	0	5.	2	12.	4
N.C.	585	t	+	2.	15	7.	51	1.	7	0	0	10.	73	20.	146
S.C.	745	10.	80	3.	24	2.	16	2.	16	0	0	-	-	17.	136
Ga.	1,060	-	-	-	-	5.	56	-	-	0	0	-	-	5.	56
*Fla.	29	-	-	-	-	-	-	-	-	0	0	-	-	-	-
Tenn.	320	t	+	1.	4	1.2	5	-	-	-	-	12.	47	18.2	72
*Ala.	1,060	-	-	-	-	-	-	-	-	0	0	-	-	-	-
*Miss.	1,260	-	-	-	-	-	-	-	-	0	0	-	-	-	-
Ark.	890	t	+	1.	10	5.	49	1.	10	t	+	3.	30	10.	99
La.	555	1.5	10	2.	14	3.5	23	-	-	0	0	2.5	17	13.	122
*Okla.	535	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	3,050	t	+	3.	121	5.	201	1.	40	12.	432	0.1	4	24.1	569
*N.M.	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Ariz.	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Calif.	205	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Others	7														
U. S.	10,734	1.	91	2.1	189	4.7	401	0.8	73	5.	432	1.9	173	17.3	1,204

* Omitted in calculations for U. S. percentage loss.

Table 17. Estimated reduction in yield of sugar beet due to nematode (*Heterodera schachtii*), curly top (virus), leaf spot (*Cercospora beticola*), Phoma rot (*Phoma betae*), and other diseases, 1935.

State	Production: 1,000 Short Tons	Estimated reduction in yield due to disease									
		Sugar Beet Nematode		Curly-top		Leaf Spot		Phoma Rot		All Diseases	
		%	1,000 Short Tons	%	1,000 Short Tons	%	1,000 Short Tons	%	1,000 Short Tons	%	1,000 Short Tons
Ohio	333	0	0	0	0	25.	128	5.	26	35.	180
Ind.		0	0	0	0	25.	+	-	-	25.	+
Mich.	777	0	0	0	0	25.	273	2.	22	29.	317
Wis.		0	0	0	0	20.	+	-	-	22.	+
Minn.		0	0	0	0	2.	+	5.	+	12.	+
Iowa		0	0	0	0	27.	+	-	-	39.5	+
N. D.		0	0	0	0	t	+	-	-	-	-
S. D.		0	0	0	0	t	+	0	0	-	-
Nebr.	606	2.	14	-	-	10.	73	-	-	17.	124
Mont.	532	0	0	10.	61	t	+	-	-	12.	73
Idaho	527	2.	12	15.	95	-	-	-	-	17.	107
Wyo.	622	-	-	-	-	t	+	t	+	2.	13
Colo.	1,823	t	+	1.5	29	5.	100	t	+	8.5	169
Utah	540	2.	13	5.	31	-	-	5.	31	14.	88
Wash.		-	-	-	-	-	-	-	-	10.	+
Calif.	1,453	2.	33	3.	50	-	-	-	-	13.	217
*Other States	771										
U. S.	7,984	0.9	72	3.1	266	6.8	574	0.9	79	15.2	1,288

* Includes Indiana, Illinois, Wisconsin, Minnesota, Iowa, North Dakota, South Dakota, Kansas, Wyoming, New Mexico, and Washington.

Table 18. Estimated reduction in yield of pear due to blight (Bacillus amylovorus), scab (Venturia pyrina), leaf blight (Fabraea maculata), and other diseases, 1935.

State	Production 1,000 Bushels	Estimated reduction in yield due to diseases							
		Blight		Scab		Leaf Blight		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
*Maine	6	-	-	-	-	-	-	-	-
*N. H.	8	-	-	-	-	-	-	-	-
*Vt.	5	-	-	-	-	-	-	-	-
Mass.	45	4.	2	t	+	-	-	4.	2
*R. I.	5	-	-	-	-	-	-	-	-
Conn.	15	-	-	-	-	-	-	2.	+
*N. Y.	663	-	-	-	-	-	-	-	-
*N. J.	79	-	-	-	-	-	-	-	-
Pa.	370	8.	34	1.	4	4.	17	14.	59
Ohio	400	1.5	6	2.	9	2.	9	5.5	24
Ind.	170	5.	9	-	-	3.	6	8.	15
Ill.	659	2.	15	t	+	5.	37	12.	89
Mich.	633	t	+	5.	33	t	+	5.	33
Wis.		2.	+	5.	+	0	0	7.	+
Iowa	102	2.	2	-	-	-	-	2.	2
Mo.	470	-	-	-	-	2.	10	2.	10
*Nebr.	44	-	-	-	-	-	-	-	-
*Kans.	217	-	-	-	-	-	-	-	-
*Del.	27	-	-	-	-	-	-	-	-
Md.	106	7.	8	3.	4	2.	2	12.	14
Va.	325	3.	10	0.5	2	t	+	4.	14
W. Va.	64	t	+	5.	3	t	+	6.	4
N. C.	222	7.	17	-	-	t	+	10.	24
*S. C.	71	-	-	-	-	-	-	-	-
*Ga.	97	-	-	-	-	-	-	-	-
*Fla.	35	-	-	-	-	-	-	-	-
*Ky.	126	-	-	-	-	-	-	-	-
Tenn.	113	90.	1,017	-	-	-	-	90.	1,017
Ala.	145	30.	62	-	-	-	-	30.	62
Miss.	121	30.	52	-	-	-	-	30.	52
*Ark.	154	-	-	-	-	-	-	-	-
*La.	50	-	-	-	-	-	-	-	-
*Okla.	245	-	-	-	-	-	-	-	-
Texas	469	5.	31	0	0	0	0	15.	94
*Idaho	57	-	-	-	-	-	-	-	-
Colo.	351	t	+	0	0	0	0	t	+
*N. M.	38	-	-	-	-	-	-	-	-
*Ariz.	12	-	-	-	-	-	-	-	-
*Utah	49	-	-	-	-	-	-	-	-
*Nev.	8	-	-	-	-	-	-	-	-
*Wash.	4,455	-	-	-	-	-	-	-	-
Oreg.	3,000	1.	33	6.	195	-	-	8.	261
*Calif.	7,024	-	-	-	-	-	-	-	-
U. S.	21,255	13.6	1,298	2.6	250	0.8	81	18.5	1,776

*Omitted in calculations for U. S. percentage loss.

Table 19. Estimated reduction in yield of apple due to bitter rot (Glomerella cingulata), black rot (Physalospora obtusa), blotch (Phyllosticta solitaria), cedar rust (Gymnosporangium spp.), blight (Bacillus amylovorus), scab (Venturia inaequalis), and other diseases, 1935.

State	Production: 1,000 Bushels	Estimated reduction in yield of apples due to diseases.													
		Bitter Rot		Black Rot		Blotch		Cedar Rust		Blight		Scab		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Maine	893	-	-	-	-	-	-	-	-	-	-	30.	383	30.	383
*N. H.	656	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vt.	708	-	-	-	-	-	-	0.5	3	-	-	2.	15	2.5	18
Mass.	2,418	t	+	2.	53	-	-	1.	26	1.	26	2.	53	8.	211
*R. I.	322	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conn.	805	-	-	0	0	-	-	1.	8	0.5	4	2.5	21	4.5	37
*N. Y.	16,875	t	+	-	-	-	-	-	-	-	-	-	-	-	-
*N. J.	4,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	11,440	0.1	18	1.	178	0.5	89	0.5	89	0.5	89	30.	5,329	35.6	6,325
Ohio	7,952	2.	190	0.5	48	0.1	10	1.	95	0.5	48	12.	1,140	16.3	1,55[illegible]
Ind.	1,903	2.	44	-	-	t	+	-	-	2.	44	10.	221	14.	309
Ill.	7,208	t	+	1.	94	2.	187	t	+	t	+	20.	1,872	23.	2,153
Mich.	9,177	0	0	t	+	0	0	t	+	t	+	20.	2,294	20.	2,294
Wis.	2,520	0	0	t	+	t	+	1.	31	3.	93	15.	467	19.	591
Minn.	1,246	0	0	0	0	0	0	0.5	7	2.	27	4.	54	7.	95
Iowa	2,079	-	-	t	+	-	-	t	+	2.	43	2.	43	4.	86
Mo.	4,425	t	+	t	+	t	+	t	+	1.	47	6.	286	7.	333
N. D.		-	-	-	-	-	-	t	+	1.5	+	t	+	1.5	+
*S. D.	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Nebr.	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kans.	1,300	-	-	-	-	-	-	-	-	-	-	-	-	t	+
*Del.	1,418	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Md.	2,412	2.	56	1.5	42	0.5	14	0.5	14	1.5	42	6.	168	14.	392
Va.	16,695	t	+	t	+	t	+	2.	398	t	+	12.	2,385	16.	3,181
W. Va.	5,610	t	+	t	+	t	+	2.5	165	t	+	10.	660	15.	990
N. C.	3,975	t	+	t	+	1.	50	2.	99	7.	348	5.	248	20.	993
S. C.	276	10.	35	t	+	-	-	-	-	3.5	12	5.	17	20.	69
Ga.	855	10.	95	-	-	-	-	-	-	-	-	-	-	10.	95

Apple (Continued)

State	Production: 1,000 Bushels	Estimated reduction in yield of apples due to diseases.													
		Bitter Rot		Black Rot		Blotch		Cedar Rust		Blight		Scab		All Diseases	
		%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
Ky.	1,496	-	-	1.	17	-	-	-	-	-	-	10.	168	11.	185
Tenn.	1,064	9.	134	1.	15	2.	30	1.5	22	3.	45	12.	179	28.5	425
Ala.	525	2.	12	-	-	-	-	-	-	3.	19	10.	62	15.	93
*Miss.	145	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ark.	1,645	-	-	t	+	1.	22	t	+	-	-	25.	556	26.	578
*La.	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Okla.	382	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas	177	3.	7	t	+	5.	12	t	+	10.	25	0	0	28.	69
Mont.	465	0	0	0	0	0	0	0	0	1.	5	1.	5	7.	35
*Idaho	5,934	0	0	0	0	0	0	0	0	-	-	-	-	-	-
Wyo.	51	0	0	0	0	0	0	0	0	20.	13	-	-	20.	13
Colo.	1,590	0	0	0	0	0	0	0	0	t	+	0	0	t	+
*N. M.	687	0	0	0	0	0	0	0	0	-	-	0	0	-	-
*Ariz.	71	0	0	0	0	0	0	0	0	-	-	0	0	-	-
*Utah	543	0	0	0	0	0	0	0	0	-	-	0	0	-	-
*Nev.	49	0	0	0	0	0	0	0	0	-	-	0	0	-	-
*Wash.	31,390	0	0	-	-	0	0	0	0	-	-	-	-	-	-
Oreg.	3,900	0	0	-	-	0	0	0	0	-	-	5.	207	6.	249
*Calif.	10,400	0	0	-	-	0	0	0	0	t	+	-	-	-	-
U. S.	168,465	0.5	591	0.4	447	0.3	414	0.8	957	0.8	930	14.1	16,833	18.4	21,752

* Omitted in calculations for U. S. percentage loss.

Table 20. Estimated reduction in yield of peach due to leaf curl (Taphrina deformans), brown rot (Sclerotinia fructicola), virus diseases, scab (Cladosporium carpophilum), and other diseases, 1935.

State	Production	Estimated reduction in yield due to diseases									
		Leaf Curl		Brown Rot		Virus Diseases		Scab		All Diseases	
	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels	%	1,000 Bushels
*N.H.	2	-	-	-	-	-	-	-	-	-	-
Mass.	21	-	-	-	-	-	-	-	-	26.	7
*R. I.	6	-	-	-	-	-	-	-	-	-	-
Conn.	37	0.5	+	1.5	1	-	-	-	-	2.	1
*N.Y.	793	-	-	-	-	-	-	-	-	-	-
*N.J.	800	-	-	-	-	-	-	-	-	-	-
Pa.	1,675	8.	171	10.	213	0.5	11	2.	43	21.5	459
Ohio	1,606	2.	35	3.	52	-	-	3.	52	8.2	143
Ind.	900	5.	48	1.5	14	-	-	-	-	6.5	62
Ill.	3,285	10.	391	5.	196	t	+	1.	39	16.	626
Mich.	1,966	15.	373	3.	75	3.	75	t	+	21.	523
Iowa	81	2.	2	3.	3	-	-	-	-	5.	5
Mo.	1,186	t	+	-	-	-	-	-	-	t	+
*Nebr.	60	-	-	-	-	-	-	-	-	-	-
*Kans.	198	-	-	-	-	-	-	-	-	-	-
*Del.	225	-	-	-	-	-	-	-	-	-	-
Md.	382	2.	9	5.	22	0.5	2	2.	8	12.	52
Va.	774	2.	16	5.	42	t	+	t	+	7.	58
W.Va.	300	5.	17	3.	10	t	+	1.	3	10.	33
N.C.	2,205	0.5	14	10.	271	1.	27	5.	135	18.5	501
S.C.	1,781	t	+	5.	105	t	+	10.	209	15.	314
*Ga.	5,628	-	-	-	-	-	-	-	-	-	-
*Fla.	52	-	-	-	-	-	-	-	-	-	-
*Ky.	546	-	-	-	-	-	-	-	-	-	-
Tenn.	899	1.5	21	35.	496	t	+	t	+	36.5	517
Ala.	825	2.	19	10.	94	-	-	-	-	12.	113
Miss.	550	-	-	10.	61	-	-	-	-	10.	61
Ark.	1,320	2.	29	1.	14	-	-	t	+	8.	115
*La.	175	-	-	-	-	-	-	-	-	-	-
*Okla.	816	-	-	-	-	-	-	-	-	-	-
Texas	1,891	1.	21	3.	64	0.5	11	2.	43	11.5	246
*Idaho	160	-	-	-	-	-	-	-	-	-	-
Colo.	1,276	0	0	t	+	6.	81	0	0	6.	81
*N.M.	103	-	-	-	-	-	-	-	-	-	-
*Ariz.	67	-	-	-	-	-	-	-	-	-	-
*Utah	680	-	-	-	-	-	-	-	-	-	-
*Nev.	8	-	-	-	-	-	-	-	-	-	-
*Wash.	928	-	-	-	-	-	-	-	-	-	-
Oreg.	297	1.	3	3.	10	-	-	-	-	7.	23
*Calif.	17,876	-	-	-	-	-	-	-	-	-	-
U. S.	52,380	4.3	1,169	6.4	1,743	0.8	207	2.	532	14.5	3,940

* Omitted in calculations for U. S. percentage loss.

Table 21. Estimated reduction in yield of cherry due to brown rot (_Sclerotinia fructicola_), leaf spot (_Coccomyces hiemalis_), and other diseases, 1935.

State	Production: Tons	Estimated reduction in yield due to diseases					
		Brown Rot		Leaf Spot		All Diseases	
		%	Tons	%	Tons	%	Tons
Mass.		20.	+	0.5	+	30.5	+
Conn.		2.	+	1.	+	3.	+
*N. Y.	22,550	-	-	-	-	-	-
Pa.	7,360	15.	1,512	10.	1,008	27.	2,722
Ohio	4,260	2.	92	5.	229	7.	321
Ind.		-	-	5.	+	5.	+
Ill.		5.	+	5.	+	10.	+
Mich.	26,660	2.	684	20.	6,836	22.	7,520
Wis.	5,040	t	+	7.	379	7.	379
Iowa		3.	+	1.	+	4.	+
Mo.		-	-	18.	+	18.	+
Md.		5.	+	3.	+	8.	+
Va.		4.	+	4.	+	8.	+
W. Va.		0.5	+	2.	+	2.5	+
N. C.		10.	+	t	+	12.	+
Tenn.		t	+	35.	+	35.	+
Ark.		t	+	50.	+	50.	+
Texas		3.	+	-	-	3.	+
Mont.	674	0	0	t	+	3.	21
*Idaho	3,024	-	-	-	-	-	-
Colo.	4,662	0	0	0	0	0	0
*Utah	3,540	-	-	-	-	-	-
*Wash.	10,400	-	-	-	-	-	-
Oreg.	12,600	5.	685	2.	274	8.	1,096
*Calif.	16,660	-	-	-	-	-	-
Twelve States	117,430	4.	2,973	11.9	8,726	16.4	12,059

* Omitted in calculations for U. S. percentage loss.

Table 22. Estimated reduction in yield of grape from black rot (Guignardia bidwellii), and other diseases, 1935.
East of Rocky Mountains

State	Production	Estimated reduction in yield due to diseases					
	Tons	Black Rot		Other Diseases		All Diseases	
		%	Tons	%	Tons	%	Tons
*Maine	14	-	-	-	-	-	-
N. H.	36	90.	32	-	-	90.	32
*Vt.	26	-	-	-	-	-	-
Mass.	322	4.	17	20.	85	24.	102
*R. I.	154	-	-	-	-	-	-
Conn.	946	1.	10	1.	10	2.	20
*N. Y.	66,500	-	-	-	-	-	-
*N. J.	3,116	-	-	-	-	-	-
Pa.	24,750	15.	4,473	2.	596	17.	5,069
Ohio	29,110	4.	1,226	1.	306	5.	1,532
*Ind.	2,849	-	-	-	-	-	-
Ill.	6,560	3.	203	-	-	3.	203
Mich.	56,310	2.	1,173	2.	1,173	4.	2,346
Wis.	340	2.	7	2.	7	4.	14
Minn.	364	t	+	t	+	0.5	2
*Iowa	7,371	-	-	-	-	-	-
*Mo.	8,840	t	+	-	-	-	-
*Nebr.	2,584	-	-	-	-	-	-
*Kans.	3,894	-	-	-	-	-	-
*Del.	2,697	-	-	-	-	-	-
Md.	676	8.	59	1.	7	9.	66
Va.	1,541	10.	175	2.	35	12.	210
W. Va.	798	5.	44	5.	44	10.	88
N. C.	3,864	5.	215	5.	215	10.	430
S. C.	854	25.	285	-	-	25.	285
Ga.	707	5.	37	-	-	5.	37
Fla.	868	2.	19	5.	46	7.	65
*Ky.	839	-	-	-	-	-	-
Tenn.	855	40.	570	-	-	40.	570
*Ala.	522	-	-	-	-	-	-
*Miss.	208	-	-	-	-	-	-
Ark.	13,520	25.	4,507	-	-	25.	4,507
*La.	44	-	-	-	-	-	-
*Okla.	2,380	-	-	-	-	-	-
Texas	1,904	20.	586	15.	439	35.	1,025
	144,325	8.5	13,638	1.8	2,963	10.3	16,603

* Omitted in calculations for total percentage loss.

Table 23. Estimated reduction in yield of strawberry due to leaf spot (Mycosphaerella fragariae), leaf scorch (Diplocarpon earliana), dwarf (Aphelenchoides fragariae), black root and root rot (various causes), and other diseases and estimated loss from fruit rots, 1935.

State	Production	Estimated reduction in yield due to diseases											
		Leaf Spot		Leaf Scorch		Dwarf		Black Root & Root Rots		All Diseases		Fruit Rots	
	1,000 °Crates	%	1,000 Crates	%	1,000 Crates	%	1,000 Crates	%	1,000 Crates	%	1,000 Crates	%	1,000 Crates
Mass.		2.	+	-	-	t	+	8.	+	30.	+	10.	+
Conn.		0.5	+	-	-	-	-	5.	+	6.5	+	-	-
*N.Y.	459	-	-	-	-	-	-	-	-	-	-	-	-
*N.J.	460	-	-	-	-	-	-	-	-	-	-	-	-
Pa.	320	1.	4	0.5	2	-	-	10.	36	11.5	42	-	-
Ohio	238	0.2	1	-	-	-	-	3.	7	3.2	8	-	-
*Ind.	220	-	-	-	-	-	-	-	-	-	-	-	-
Ill.	348	t	+	t	+	0	0	5.	18	5.	18	-	-
Mich.	440	t	+	t	+	0	0	5.	23	5.	23	-	-
Wis.	297	t	+	t	+	0	0	5.	17	10.	34	-	-
Minn.		-	-	-	-	-	-	-	-	1.5	+	-	-
Iowa	132	3.	4	-	-	-	-	10.	14	13.	18	-	-
*Mo.	310	-	-	-	-	-	-	-	-	-	-	-	-
N.D.		t	+	-	-	-	-	-	-	1.	+	-	-
*Kans.	27	-	-	-	-	-	-	-	-	-	-	-	-
*Del.	468	-	-	-	-	-	-	-	-	-	-	-	-
Md.	715	1.	9	1.	9	t	+	15.	129	17.	147	-	-
Va.	693	3.	24	1.	8	-	-	10.	82	15.	122	-	-
W.Va.		t	+	-	-	-	-	t	+	-	-	-	-
N.C.	770	2.	17	2.	17	2.	17	-	-	11.	94	-	-
*S.C.	40	-	-	-	-	-	-	-	-	-	-	-	-
*Ga.	34	-	-	-	-	-	-	-	-	-	-	-	-
*Fla.	546	-	-	-	-	-	-	-	-	-	-	-	-
*Ky.	600	-	-	-	-	-	-	-	-	-	-	-	-
Tenn.	908	2.	21	10.	106	t	+	2.5	27	14.5	154	9.	90
*Ala.	212	-	-	-	-	-	-	-	-	-	-	-	-
*Miss.	36	-	-	-	-	-	-	-	-	-	-	-	-
Ark.	370	1.	5	1.	5	1.	5	-	-	28.	144	-	-
La.	801	8.	87	3.	33	0.5	5	-	-	26.5	289	5.	42
*Okla.	28	-	-	-	-	-	-	-	-	-	-	-	-
Texas	69	1.	1	1.	1	t	+	4.	3	8.	6	0.5	+
Mont.		t	+	0	0	0	0	5.	+	11.	+	-	-
*Utah	45	-	-	-	-	-	-	-	-	-	-	-	-
*Wash.	765	-	-	-	-	-	-	-	-	-	-	-	-
Oreg.	588	1.	8	t	+	-	-	5.	40	26.	207	-	-
*Calif.	742	-	-	-	-	-	-	-	-	-	-	-	-
U. S.	11,681	2.3	181	2.3	181	0.3	27	4.9	396	16.3	1,306	6.9	132

* Omitted in calculations for U. S. percentage loss.

° 24-quart crates, 36 pounds.